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SECTION II-A

TRAINING REQUIREMENTS INITIATION/REVIEW AND SPONSORSHIP

1. THE SYSTEM FOR REQUIREMENTS REVIEW, VALIDATION AND SPONSORSHIP.

a. General.

This section focuses on general training requirements including those emanating from on-going training programs.

(1) The types and roles of Chief of Naval Operations (CNO) sponsors are described in OPNAVINSTs 1500.8M and 5000.50A. OPNAVINST 5000.50A is the primary source of Navy training device acquisition and management guidance.

(2) In order to support the planning and acquisition management requirements of OPNAVINST 5000.50A, the Training Device Management Information System (TRADMIS) was established by the Chief of Naval Operations, Director of Naval Training (N7). TRADMIS is a database that contains information on the status of training device programs currently in the acquisition phase. TRADMIS reports are issued semi-annually to participants in training system acquisitions. Specifically, for devices reported, TRADMIS lists the program supported by the device(s), the sponsors, the program offices, and the Training Agencies (TAs). It also identifies milestones for the Training Device Requirements Documents (TDRDs), the Training Effectiveness Evaluation Plans (TEEPs), the Training System Functional Description (TSFD), (formerly the Military Characteristics (MC) document), the Ready for Training (RFT) dates, and the dates that the Fleet Project Teams (FPTs) were established. Funding data, the quantity of trainers being procured, and the trainer types are also reported in TRADMIS.

(3) Surface Warfare Training Review Board (SWTRB) and Submarine Training/Trainer Working Group (STTWG).

To improve efficiency and effectiveness of Surface and Undersea requirements plan-

ning, the CNO has established two special groups: the STTWG and SWTRB. They are continuous forums for identification, review, validation, and prioritization of requirements for new devices/systems, and for related updates and logistics planning for existing devices. The composition and charters of the SWTRB and STTWG are described in subsequent parts of this section. These two groups are NOT substitutes for the traditional chain of command, but they do pave the way for submission of requirements and associated required resources; their minutes and action items are good references for official chain of command requests. However, the Program Objective Memorandum (POM), Training Device Requirement Issue Paper (TDRIP), Military Construction (MILCON), and other documents must still be developed, submitted through traditional channels, and ready by POM review time for input into the Planning, Programming and Budgeting System (PPBS).

(4) The Naval Aviation, Marine Corps (Ground), and Bureau of Medicine and Surgery requirements processing communities rely on traditional chain of command for training requirements processing; there is no direct counterpart for the SWTRB/STTWG in these communities.

(a) The Naval Aviation community does designate training system model managers for each Weapon System (WS): either Commander, Naval Air Systems Command, Pacific (COMNAVAIRPAC) or Commander, Naval Air Systems, Atlantic (COMNAVAIRLANT). Aviation Weapon System model managers are involved in the WS operational phase maintenance and modification of the training system. Appropriate NAVAIRSYSCOM instructions will define which of these Type Commands (TYCOMs) has training system model manager responsibilities for the WS and the role they play in training device re-

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quirements review, prioritization, and sponsorship.

(b) Aviation Program Reviews are held quarterly, between NAWCTSD and the Naval Air Systems Command, PMA-205. The purpose of these quarterly meetings is review of Aviation training projects and out year planning by Weapon System platform. This review is primarily to inform PMA-205; NAWCTSD attendees normally include the PD, the PJM and other members of the project team, and primary business and financial support personnel.

b. General Procedures for Requesting New Training Equipment.

Any Navy activity can request development of new training equipment to fill existing or anticipated training requirements. The various review groups (such as the SWTRB/STTWG) and the chain of command that the originator must follow to gain approval, often have their own form for use in identifying a requirement. Navy activities should request development of new training equipment by letter. This letter and supporting data must be forwarded to the cognizant Training Agency (TA) via the appropriate chain of command or to an appropriate cognizant review group such as the SWTRB/STTWG in accordance with applicable chain of command guidelines. If the originator of the request believes that what is needed may fall under the OPNAVINST 5000.50A definition of a training device, information copies of the letter should be sent to NAWCTSD. If desired, NAWCTSD Instructional Systems Analysis and Development Division (Code 497) assistance may be requested to aid in determining whether or not a training system offers the best solution to the need, or if other alternatives are required. Navy TAs empowered to sponsor development of new equipment are as follows:

Commanders in Chief Atlantic and Pacific Fleet

Chief of Naval Education and Training

Commander, Bureau of Medicine and Surgery

Commanding General, Marine Corps
Combat Development Command
(Code C 465)

Commander, Naval Reserve Force

c. Usefulness of the Navy Training Plan (NTP) in Stating New Requirements for Already Fielded Training Systems.

If the fielded training system is already identified in an NTP, and the system custodian desires changes to improve training or to eliminate training deficiencies, the NTP is an ideal document to review and reference in the statement of new requirements. The NTP is to be reviewed each year and kept current with changing requirements. Referencing it in the statement of new requirements, and changing it to reflect resultant changes to the training systems, is consistent with Office of the Chief of Naval Operations (OPNAV) guidance (OPNAVINST 1500.8M, Navy Training Planning Process, 18 Sep 86). Information needed to explain and justify the new requirements can be reduced by referencing information contained in the NTP. The training system custodian may, or may not, be the user of the training system. However, based on comments received from the users (those being trained), the custodian's recommended changes often represent the viewpoint of the user as well as the custodian. Cognizance Symbol (Cog 2"0") training devices are often only a part of the weapon system training system described in the NTP.

d. How the NAWCTSD "Fits In".

(1) NAWCTSD is unique among Training Material and Training Support community members because it is the only member of both communities that is involved in the training systems of every warfare environment and the general training environment. This places NAWCTSD project managers, engineers, logisticians, training specialists, and other logistics specialists in an ideal

position to apply the most cost effective or training effective solutions to training problems for all warfare/training environments.

(2) The resources of the NAWCTSD and appropriate SYSCOMs are available to assist the equipment and systems users/custodians in almost every phase of equipment advance planning, except for requirements prioritization, sponsorship, and funding. Major NAWCTSD assistance during the advance planning stages is generally arranged by means of planning tasks assigned by the cognizant SYSCOM or by formal requests from a TA. The NAWCTSD participates in meetings of the SWTRB and the STTWG and may be tasked by these groups on various action items. NAWCTSD assistance may be requested by contacting the cognizant Program Director in Orlando, or by contacting the Regional Representative, LANT or PAC (contact points and telephone numbers are provided in Appendix E).

e. Surface Warfare Training Review Board/Submarine Training /Trainer Working Group (SWTRB/STTWG) and Their Relative Role Compared to Fleet Project Teams (FPTs).

The FPT and the SWTRB/STTWG each provide system user/custodian recommendations and other fleet inputs that influence training system development or modification. The basic difference between the purposes and charters of the SWTRB/STTWG and the charter of a FPT is that the FPTs are generally ad hoc groups established to provide fleet input on a specific piece of equipment such as a training or warfare system type; i.e., 14A12 or 20B5. The SWTRB/STTWGs are permanently established and meet semi-annually to discuss all trainers.

The training system FPT is established to support the training system acquisition processes. It is requested by the NAWCTSD and will work with the NAWCTSD's Training Device Project Team (TDPT). Some training systems may not have a FPT; the need for a FPT is decided by the NAWCTSD Program Director/Project Manager (PD/PJM). The system user/custodian will always be involved, even if a FPT is not designated. Gen-

erally, after the equipment for which the FPT was formed is out of the acquisition phase, the FPT is dissolved and is replaced by a less formalized fleet interface with the TDPT for equipment modifications and other logistics support planning/actions.

2. WARFARE ENVIRONMENT CHANNELS/SPONSORSHIP GROUP.

a. Marine Corps Process for Review and Sponsorship.

(1) The Marine Corps Systems Command will budget for the development and procurement of all categories of training systems except Aviation-related systems which are under the cognizance of the Navy. Development, procurement, and distribution will be in response to requirements validated by the Marine Corps Combat Development Command (MCCDC) and subject to the availability of funds. Marine Corps Orders P5290.3, Marine Corps Training and Visual Information Support Manual, and Marine Corps Order (MCO) 3900.4D, Marine Corps Initiation and Operational Requirements Documents, provide information regarding Marine Corps requirements for new training systems/devices and information on requesting them via the chain of command.

(a) The Marine Corps Liaison Officer (MCLO) at the NAWCTSD will provide for managerial coordination and control between the NAWCTSD and the Marine Corps, and for the training programs undertaken by the NAWCTSD. This representative also identifies and reports resources necessary to support Marine Corps requirements and develops budgetary information for inclusion in the Marine Corps budgetary cycle. Also, the MCLO will coordinate the initiation and execution of research and development programs which pertain to training as directed by the Commanding General, Marine Corps Systems Command (Code SST) and advise the NAWCTSD on training systems problems relative to the Marine Corps training systems program. The MCLO is also the NAWCTSD Program Director

1. **Problem.** Clearly define the deficiency or the required improvement. What cannot be done now that the proposed solution will fix? What will be improved through use of the system?
2. **Justification.** State the impact if the need is not resolved.
3. **Operational Concept.** How will the material be employed? Will it replace any current item of equipment?
4. **Organizational Concept.** Who will employ the system? What organizational level?
5. **Desired Characteristics.** Identify pertinent operational (performance) suitability, physical, and logistical characteristics.
6. **Support Requirements.** What associated items of equipment are envisioned?
7. **Availability.** If known, indicate whether commercial or other service equipment, foreign or domestic, is available for off-the-shelf procurement.
8. **Procurement.** Indicate when the need must be resolved. State whether it will meet an operational requirement or is for evaluation purposes only.
9. **Recommendation.** Provide recommended solution.

Figure II-A-1. Fleet Marine Force Operational Needs Statement

for Marine Corps Ground Training Programs (Code 10M).

(2) Requests for the development of new Aviation-related systems should be submitted via the chain of command to the Commanding General, Marine Corps Combat Development Command (Code C 465).

(3) The Fleet Operational Needs Statements (FONS) depicted in Figure II-A-1, is submitted by subordinate commands via the chain of command (including the local base or station) to the Commanding General, Fleet Marine Force Atlantic (FMFLANT) or Commanding General, Fleet Marine Force Pacific (FMFPAC) for consolidation, prioritization, and submission to the Commanding General, Marine Corps Combat Development Command (Code C 465) by 31 January and 31 July of each year. (See Marine Corps Order 3900.4D, Marine Corps Program Initiation and Operational Requirements Documents.)

Requirements considered urgent should be identified and submitted at any time. These urgent submissions should identify what other requirement(s) can be downgraded in priority to accommodate new requirements.

The general diagram for requirements identification and validation is provided in Figure II-A-2.

(4) The basic responsibility for identifying and justifying training requirements (either hardware, software systems, or devices) lies with the command which is responsible for carrying out training requirements. The FONS (Figure II-A-1) describes a need to correct a training deficiency which has an impact on mission accomplishment and the essential operational characteristics desired.

(5) Generally, any echelon of command will identify their training requirements to their appropriate Training and Visual Information Support Center (TAVSC), as indicated in enclosure (3) of MCO 5290.2. The forwarding of requirements through the TAVSC allows proper consideration to be given to budgetary, manpower, facilities, maintenance, and training support. The policies and procedures for the management and operation of TAVSCs and the training assets within the Marine Corps are established in MCO 5290.3.

(6) Responsibility for TAVSC's activities with the Marine Corps rests with the Commanding General, Marine Corps Combat Development Command (CG, MCCDC) (Code C 465), Quantico, VA 22134-5050, who provides policy guidance and coordinates resource management of TAVSCs. The CG, MCCDC (Code C 465) also designates fleet personnel as subject matter experts (SMEs) and provides members for working panels, groups, boards, and committees and information relative to Marine Corps TAVSC programs.

(7) CG, MCCDC (C 465) exercises functional control over all TAVSCs except support dedicated to the operating forces. These responsibilities include: review of training systems/devices requirements for ground training support, management of ground training support, and coordination of fiscal operations relative to TAVSC programs.

b. Surface Warfare Training Systems Acquisition Process and Responsibilities.

(1) The policies related to Surface warfare training system requirements identification, review, and development are established by OPNAVINST 5000.42D, Surface Warfare Training System Acquisition Process and Responsibilities.

(2) As an important element in the concept for implementation and continuation of these policies, the OPNAV Instruction assigns the following responsibilities:

(a) Naval Sea Systems Command (NAVSEASYS COM), Naval Air Systems Command (NAVAIRSYS COM), and Space and Naval Warfare Systems Command (SPAWAR) will designate a SYS COM Training Coordinator (STC) to monitor all acquisition and modification programs within the command and to certify necessary Manpower, Personnel and Training (MPT) actions and milestones are being accomplished.

NAVSEASYS COM will take the lead in establishing and maintaining centralized data bases to support training program acquisitions. Program status will

be available to the Director, Surface Warfare Manpower and Training Requirements Division (N869) as required.

(b) Responsible organizations will execute responsibilities as indicated in OPNAV guidance (OPNAV P-111-1, Navy Training Plan Manual). This guide identifies the NTP process as the follow-on action of the HARDMAN analysis and planning process, and provides information on the development or revision for life cycle MPT support.

c. Surface Warfare Training Review Board (SWTRB).

(1) The Chief of Naval Operations established (via OPNAVINST 3502.4A) the SWTRB membership as a forum of the major commands and activities responsible for the identification of requirements, development, procurement, installation, and logistics support for training systems. It is chaired by N869. The SWTRB tasks and scope of activities include the following:

(a) Address Surface Warfare training with a goal of developing long range training plans to include the efficient and timely support of new Surface-related equipment.

(b) Review existing Surface Warfare training to determine problem areas and recommend corrective action.

(c) Act as a mechanism to provide fleet feedback and recommendations to enhance Surface Warfare training effectiveness.

(d) Provide direction and guidance to subordinate committees, and identify agenda and action items for each.

(e) Review and prioritize Technical Training Equipment (TTE); and Training Device (TD) overhaul, modification, and phase out plans for each fiscal year as presented by each steering committee and NAVSEASYS COM (04MP).

(f) Review and prioritize training equipment/device requirements and resource requirements.

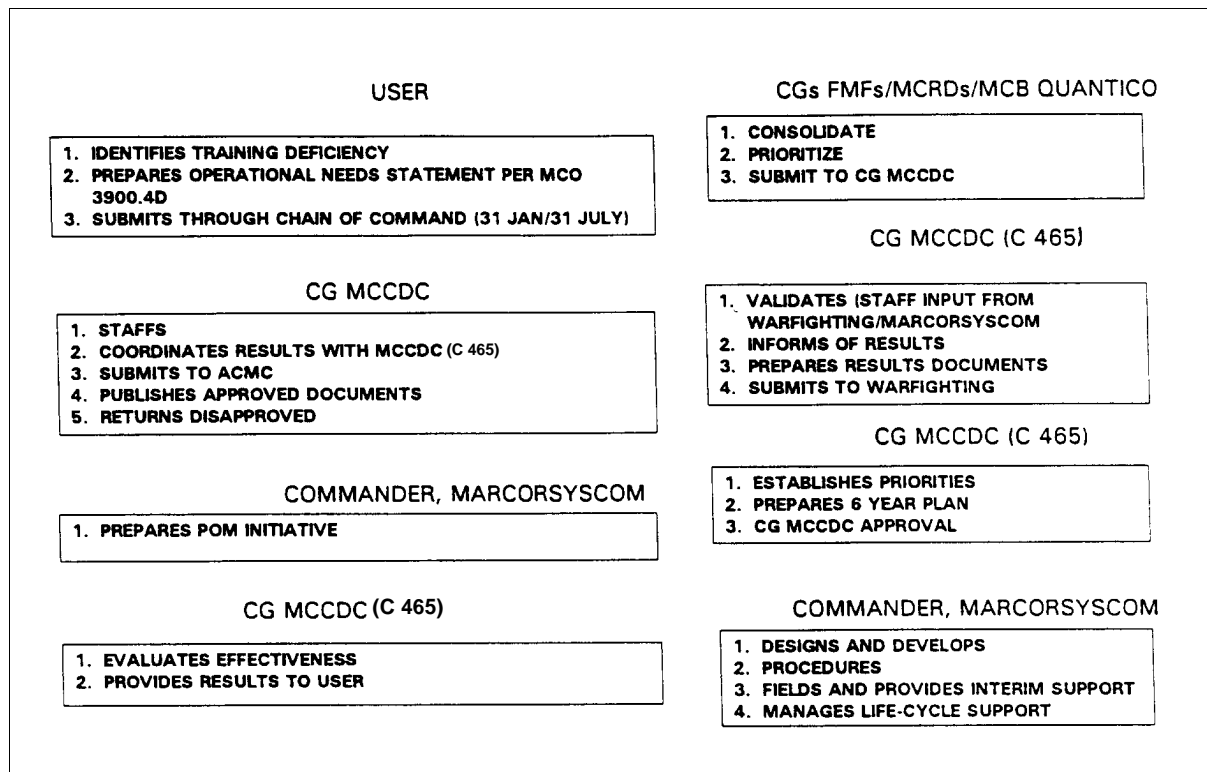


Figure II-A-2. Marine Corps Requirements, Identification/Validation

(g) Formulate and transmit to N869 specific recommendations regarding the inclusion of embedded training capabilities in each new system/equipment either introduced in the fleet or submitted by the steering committees. Recommendations shall include the nature and extent of shore-based training which can migrate to ships, the resulting economies, and all resource requirements and potential compensations. In cases where embedded training is not advised, a statement of the rationale for the negative recommendation shall be included.

(2) The SWTRB membership includes the following: CNO (N7, N862, N865, N867, N869), CNET, CNTECHTRA, COMNAVSURFLANT, COMNAVSURFRFPAC, COMNAVSURFRESFOR, COMTRALANT/CINCLANTFLT,

COMTRAPAC/CINCPACFLT, NAVSEA (04), COMNAVSPAWARSSYSCOM (Technical Advisor), CO NAWCTSD, and CO SWOSCOLCOM.

(3) The SWTRB meets semi-annually (spring and fall). The Board directs the efforts of two subordinate steering committees: the Combat Systems Manpower and Training Steering Committee (CSMTSC) and the Conventional Marine Propulsion Training Steering Committee (CMPTSC). The SWTRB, CSMTSC, and CMPTSC are supported by the Training Technology Working Group. The Training Technology Working Group is responsible for conducting research and providing briefings on new and future developments in training technology. The members are CNO (N869) (chairperson), CNET, CINCLANTFLT and CINCPACFLT. Those members with limited voting privileges include CNO (N7),

COMNAVSURFRESFOR, COMNAVSESSYSCOM, and COMSPAWARSSYSCOM. Non-voting members are OPNAV System Sponsors (as required), CNTECHTRA, NAWCTSD, NAVSEA (04MP), COMTRALANT, COMTRAPAC, COMSURFWARDEVGRU, SWOSCOLOM, CONTRACTRAGRULANT, CONTRACTRAGRUPAC, COMNAV SURF PAC, NAVSHIPWPNSYSENGSTA, COMOPTEVFOR, and Working Group Co-Chair.

(4) Responsible organizations will execute responsibilities as indicated in OPNAV guidance (OPNAVINST 5000.42d, Surface Warfare Training System Acquisition Process and Responsibilities). This guide identifies the NTP process as the follow-on action of the HARDMAN analysis and planning process, provides information on the development or revision for life-cycle MPT support.

d. Submarine Training/Trainer Working Group (STTWG).

The CNO formally established a Submarine Trainer Working Group by letter on 7 Oct 75. This group was redesignated the Submarine Training/Trainer Working Group by CNO letter on 16 Jun 82, which also updated the charter to accommodate the current nature and posture of submarine training. STTWG operating procedures are governed by directive OPNAVINST 3502.2 (Series), Undersea Warfare Training Committees.

3. NAVAL AVIATION TRAINING PROGRAM.

a. General.

The Deputy Chief of Naval Operations (DCNO) (N88) is responsible for establishment of policy, requirements and priority of Aviation training and the development of Aviation training plans; the supervision and direction of TYCOMS Aviation training including approval of establishment, disestablishment, and modification of training programs therein. The total responsibilities and procedures for the Naval Aviation Training Program are detailed in OPNAVINST 1500.11, Naval Aviation Training Program Policies, Responsibilities, and Procedures, 19 Jun 74. The

purpose is to ensure coordination of manpower requirements, training support requirements, and training program planning concurrently with equipment development and production. Manpower and training requirements and capabilities will be estimated during the early stages of systems development for purposes of performance, cost effectiveness, and trade-off evaluations. The total requirements for personnel, training equipment, and training facilities will be determined and incorporated into the budget cycle as early as necessary to ensure adequate lead times prior to the date required for training and the operational introduction of the related aircraft or equipment.

b. Sponsorship.

In sponsorship of training systems, the following responsibilities and procedures apply:

(1) DCNO (N88).

(a) Fulfills defined responsibilities for the support of new developments and the formulation of Navy Training Plans (NTPs). (See OPNAVINST 1500.8M, Navy Training Planning Process.)

(b) Functions as a program element sponsor for Aviation manpower requirements.

(c) Provides the Air TYCOMS and other commanders, as appropriate, with semi-annual major simulator and maintenance trainer procurement plans, for the purpose of initiating fleet facility and manpower requirements.

(2) Type Commanders (TYCOMs).

(a) Establish procedures to provide inter-fleet coordination of training objectives and training program coverage.

(b) Provide operational direction and systematic training evaluation, utilizing the most advanced learning measurement techniques of Naval Air Systems Command maintenance and weapons systems trainers.

(c) Submit training system requirements annually to CNO (OP-59). Require-

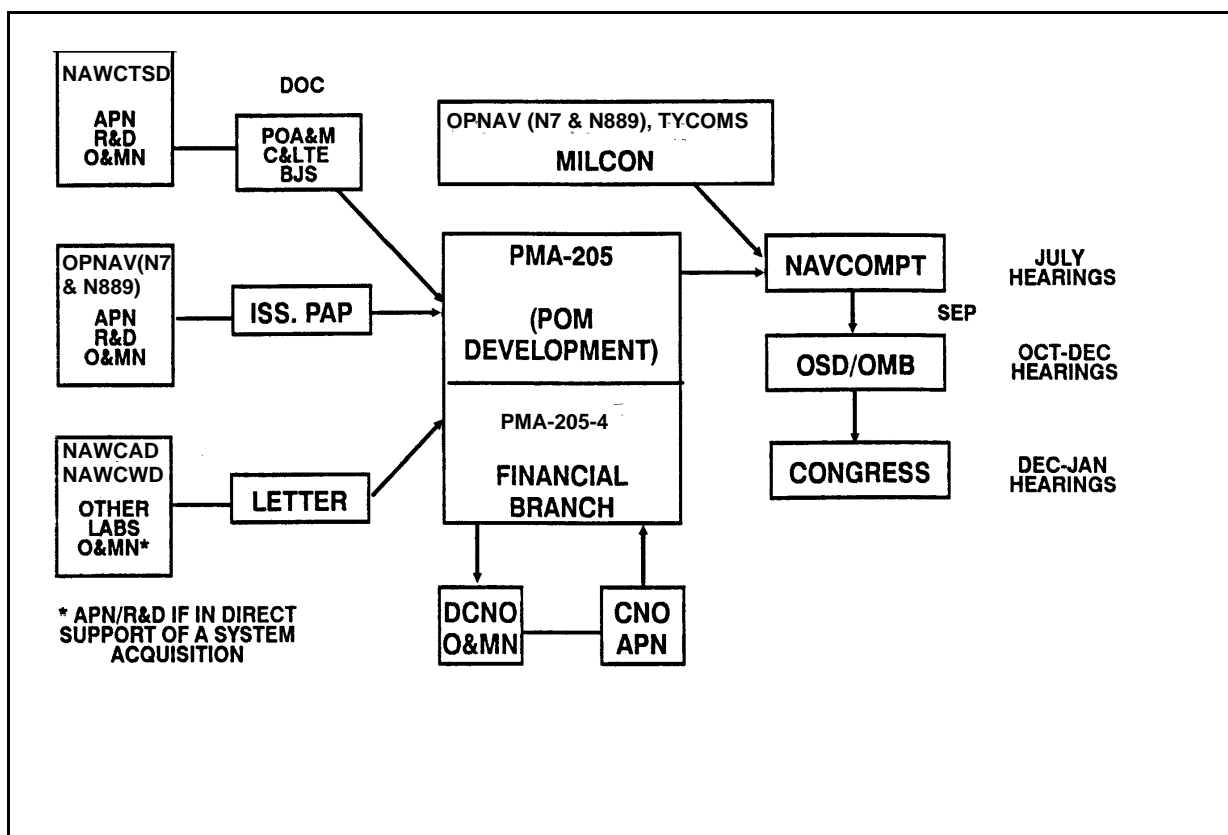


Figure II-A-3. Air Program POM Process

ments will be submitted for two fiscal years to enable proper budgetary planning.

(d) Participate in the development, acquisition, and acceptance of major Aviation devices by providing fleet project team representation.

(3) Naval Air Systems Command (NAVAIRSYSCOM).

(a) Tasks NAWCTSD, CNET, and various Navy Laboratories to provide cost estimates in support of system acquisition, as shown in Figure II-A-3.

(b) Develops Program Objectives Memorandum (POM) (budget submission) for review by CNO.

(c) Provides on-call support to defend system programs before the Office of

the Secretary of Defense/Office of Management and Budget of Congress.

(4) Chief of Naval Education and Training (CNET).

(a) Fulfills responsibilities in support of new development and NTPs.

(b) Attends Aviation training conferences and participates in the planning required to satisfy training requirements established by DCNO (N88/N889) for Aviation training programs.

(c) Provides planning, programming, and budgetary data for manpower training resources, including facilities required to support the training requirements assigned.

(d) Coordinates new and revised Aviation curriculum outlines, and other train-

ing publications together with a listing of the required training equipment with the appropriate SYSCOM activities and DCNO (N88), to enhance technical adequacy and improve training support.

(e) Submits Aviation training system requirements in accordance with the procedures outlined for TYCOMs.

(5) Principal Development Activity (PDA).

(a) Establishes detailed procedures to identify Navy and Marine Corps manpower and training requirements associated with the maintenance and operation of new Aviation weapons systems, related support equipment and major training systems. Such information is to be furnished on a schedule consistent with the budgetary cycle in order to ensure manpower and training support.

(b) Furnishes to the DCNO (N88), recommended schedules of training plans conferences, coordinated with and appropriate to the status of development and procurement efforts. Arranges for and supports such conferences under the chairmanship and general direction of DCNO (N88).

(c) Furnishes to DCNO (N88), (with copies to the Naval Air Force Commanders; Commanding Generals, Fleet Marine Forces; Commanding General, Marine Corps Combat Development Command (Code C 465); and other cognizant activities), a recommended training plan for each new weapon system component and item of support equipment requiring establishment of in-house Navy training. (Plans should be submitted at least three years prior to fleet introduction, or as soon as possible where initial authorization for development and procurement preclude three years lead time, and revised as appropriate thereafter.)

(d) Provides regular and recurring reviews of existing training programs and curricula as they apply to systems and

equipment within their technical cognizance. These reviews will determine technical adequacy along with suitability and availability of training systems. Recommends changes required to achieve and maintain maximum effectiveness to the DCNO (N88) and CNET.

(e) Initiates action consistent with guidance regarding development for procurement, allocation, installation, maintenance, repair, and modification of systems required in support of Aviation training programs. (See Navy Comptroller Manual, Vol. 7, 2 Apr 70 w/ch. 63, 22 Jul 93, and OPNAVINST 4490.2C, Availability of Operational Equipment and Technical Manuals for Training Purposes, 20 Dec 85.)

(f) Provides for alteration, conversion, and rehabilitation of facilities required incident to installation and removal of training systems, consistent with the provisions of NAVCOMPT guidance.

(g) Provides technical assistance in identifying training problems and developing training programs.

(h) Arranges for and provides factory or other specified contract training and arranges for interservice training in accordance with guidance (OPNAVINST 1500.27D, Interservice Training).

(i) Provides training systems in accordance with guidance (Navy Comptroller Manual, Vol. 7).

(j) Provides engineering and technical services as authorized by SECNAVINST 5000.2A, Implementation of Defense Acquisition Management Policy, Procedures, Documentation, and Reports.

4. INTERNATIONAL PROGRAMS.

a. General.

(1) International Programs consist of the Military Assistance Program (MAP) and the Foreign Military Sales (FMS) Program. The FMS Program is authorized under the authority of the Foreign Assistance Act of

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1961, as amended. Funds for the MAP are authorized by Congress and allocated to friendly governments in exchange for rights in that country, such as allowing the U.S. Government to maintain an airfield or naval base. The FMS Program is authorized under the Arms Export Control Act and sales are made to friendly foreign governments with the U.S. Government acting as procuring agent.

(2) The Acts authorizing MAP and FMS programs encompass political/economic consideration, as well as military support and are used as instruments to support the United States Government's foreign policy. The objectives of the MAP and FMS programs are to furnish appropriate defense equipment, supporting materials, and services to eligible friendly foreign governments and in the case of FMS, to contribute to a favorable balance of payments. FMS agreements commit the United States to the delivery of specific items or services at scheduled times and the foreign government commits funds for these acquisitions. The United States Government acts as the responsible acquisition agent for the foreign government. (See Figure II-A-4)

(3) The Navy International Programs Office (IPO) is governed by policies of the Office of the Secretary of Defense (OSD) and the Chief of Naval Operations (CNO) which state that:

(a) The IPO requirements will be integrated to the extent practicable with the United States Navy's program acquisitions.

(b) Each piece of equipment requiring support and offered through the IPO will have a Logistics Support Plan (LSP).

(c) Foreign government requirements under the IPO will receive equal priority with equivalent United States Military Requirements.

b. NAWCTSD IPO Management.

(1) IPO representatives are located in each of the Program Directorates and are in contact with foreign personnel from every corner of the globe who visit the Command to

be briefed on the latest in training device technology and to request help under the DOD International Programs. (See Figure II-A-5)

(2) Since becoming involved in the Foreign Military Sales (FMS) component of the International Programs, the NAWCTSD has had business transactions with over 50 nations. The NAWCTSD has delivered over 60,000 units of approximately 600 different training devices to various nations. The devices vary in size and complexity from simple "matchbox type" aids for teaching Morse Code costing about one dollar per unit, to large mission-type trainers costing over \$50M per unit. The IPO duties include but are not limited to the following:

(a) Establish and document specific requirements for training material, equipment, and services through liaison and discussions with the CNO or officials of the requesting foreign government.

(b) In conjunction with the appropriate Project Director, develop plans, programs, and schedules for the selection, production, modification, and acquisition of training material, equipment, and services requested by foreign governments.

(c) Conduct liaison with outside agencies on foreign country requirements funding and policy matters.

(d) Obtain and forward information required by the CNO and by other commands relating to training systems or services including design, price and availability, contracting, utilization, modernization, modification, and support. Price and availability information provided to the CNO for use in preparing Letters of Offer and Acceptance to foreign governments will include a support plan and support costs.

(e) Coordinate FMS acquisition efforts with known service requirements within the NAWCTSD.

(f) Ensure that approved foreign government requirements receive attention

equal to equivalent United States requirements.

(g) Ensure that all NAWCTSD codes concerned with IPO matters are familiar with current MAP and FMS policies and procedures.

(h) Obtain necessary reimbursable resources (funding and manpower) to support allied programs to ensure that these programs do not impact on-going U.S. Government programs.

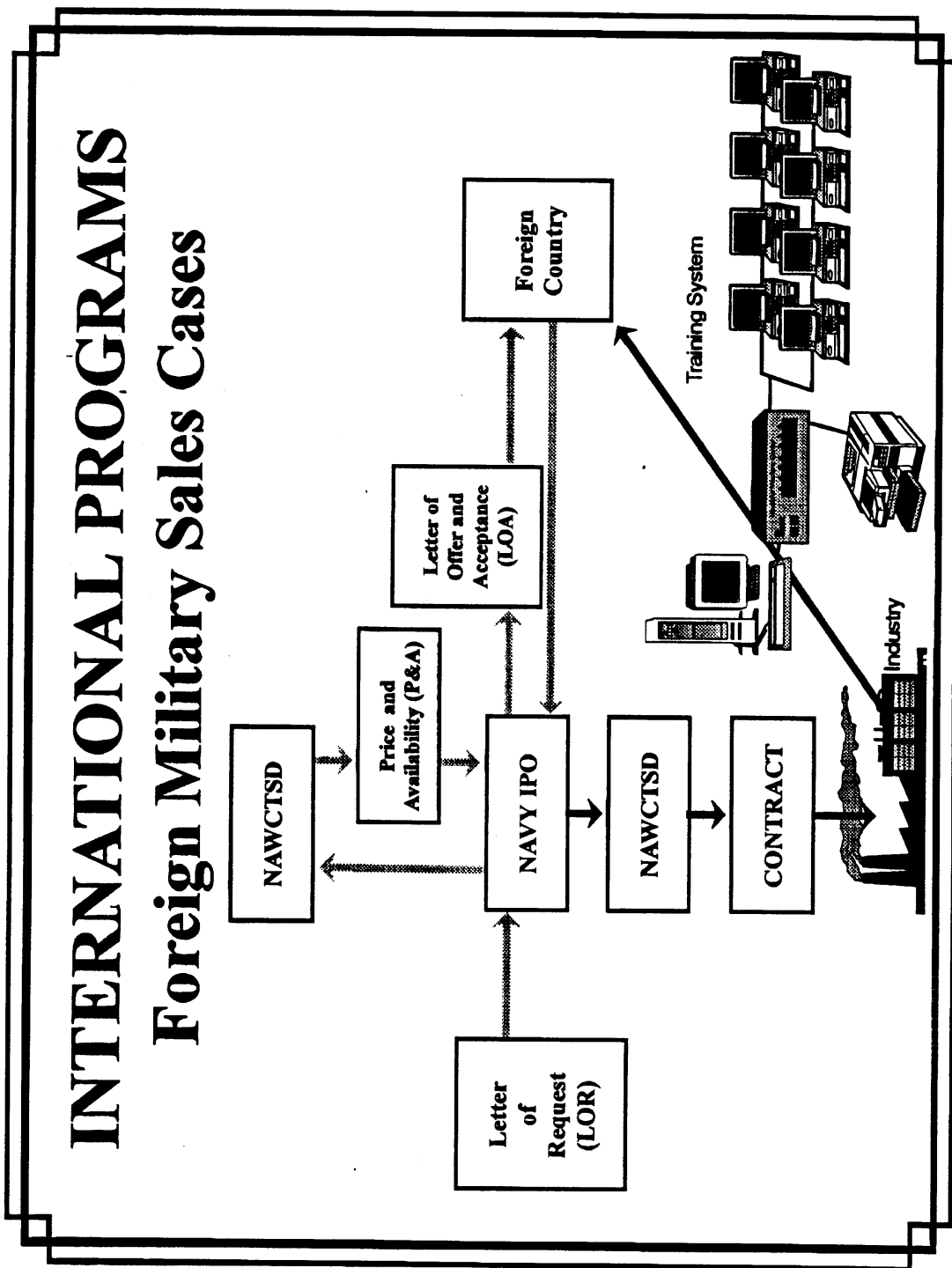


Figure II-A-4. International Programs-Foreign Military Sales Cases

INTERNATIONAL PROGRAMS

Execution Process

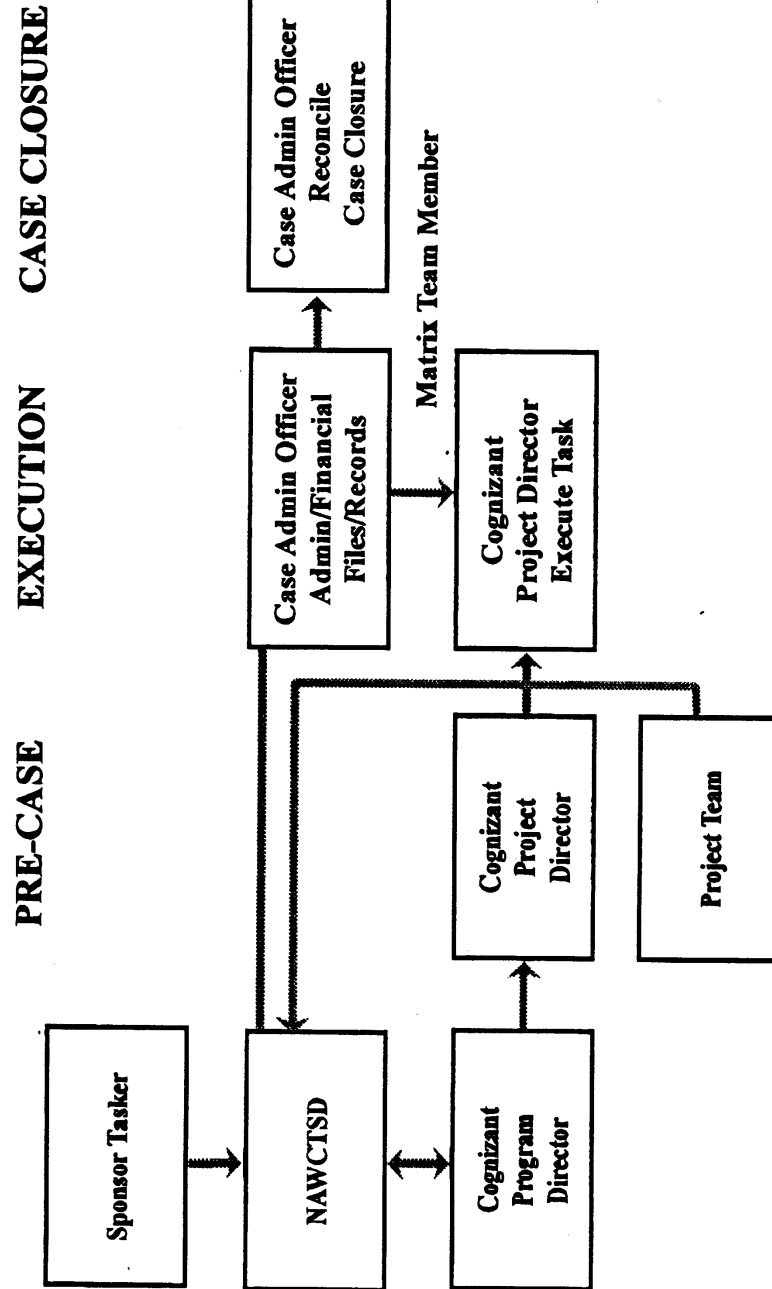


Figure II-A-5, International Programs - Execution Process

SECTION II-B

NAWCTSD TRAINING REQUIREMENTS ASSISTANCE

1. TRAINING SYSTEMS REQUIREMENTS ANALYSIS (TSRA)

a. The Navy's TSRA process is summarized in Figure II-B-1. The TSRA has been adapted from and meets OPNAV requirements (OPNAVINST 5000.5A, Navy Training Simulator and Device Acquisition and Management, 12 Aug 87). It is important to understand that the TSRA process is tailored by the training analyst to fit the scope of the training requirement. Obviously, the analysis required to support a minor update to a part task trainer would differ in scope and resources from the analysis required to support the new development of a major new training simulator.

b. As shown in Figure II-B-1, the TSRA proceeds through four major analysis activities. Each activity concludes with publication of a document or report. The general flow of the analysis starts with the identification and verification of a training need. It then proceeds with identification of alternative solutions, and culminates with the detailed specifications required for acquisition.

c. All training system requirement analysis is initiated by a user/sponsor who identifies a need. This need may be in response to a new or modified equipment requirement, a new mission or tactics requirement, job or student performance deficiencies, advances in instructional technology, or some other impetus. The user may state the need in the HARDMAN Manpower, Personnel, and Training Resources Requirements Document (MPTRRD); in an Operational Requirement (OR); in a Navy Training Plan (NTP); or in some other form of documentation. The scope of the TSRA is, in part, determined by the point of initiation of the need. For example, if the need is initiated with an OR, the TSRA would provide inputs to the HARDMAN and NTP process. If the need is initiated in a NTP, many decisions would already be made without benefit of the TSRA analysis. In this case, the TSRA would proceed on the basis of prescribed requirements

unless the sponsor requested validation of those requirements.

d. Upon request from a sponsoring agency to initiate a systematic investigation of a particular training need, the NAWCTSD will, with the help of the user/custodian community, perform a TSRA, and make recommendations for alternate solutions to satisfy the training need. The TSRA provides the first analysis of the training requirements for the weapon system.

e. The TSRA describes the basic purpose of the training (weapon system) platform type, equipment, system, subsystems, the type of training provided (operator, maintenance, team), the location and performance requirements (level of training). One of the major components of the TSRA is a list of training objectives (what knowledge and skills are to be learned). Included is rationale supporting use of a training device (as opposed, for example, to on-the-job training); this rationale would consider such factors as cost, availability, and maintainability.

f. The results of the TSRA are thoroughly coordinated with the fleet and training community before being incorporated into an alternatives document. The TSRA can be used in whole, or in part in other training documents, e.g., the Training System Alternatives Report (TSAR), Training Device Requirements Document (TDRD), Navy Training Plan (NTP), and Training System Functional description (TSFD). (The TSFD was formerly the Military Characteristics (MC) document.)

2. TRAINING SITUATION ANALYSIS (TSA)

When a general training need has been stated and NAWCTSD assistance has been requested, a TSA may be performed to further define the need and to identify and evaluate possible alternative solutions. The process for general training problem analysis is illustrated in Figure II-B-1. The TSA takes a broad look at all aspects of an existing or emerging training situation or program. The process is

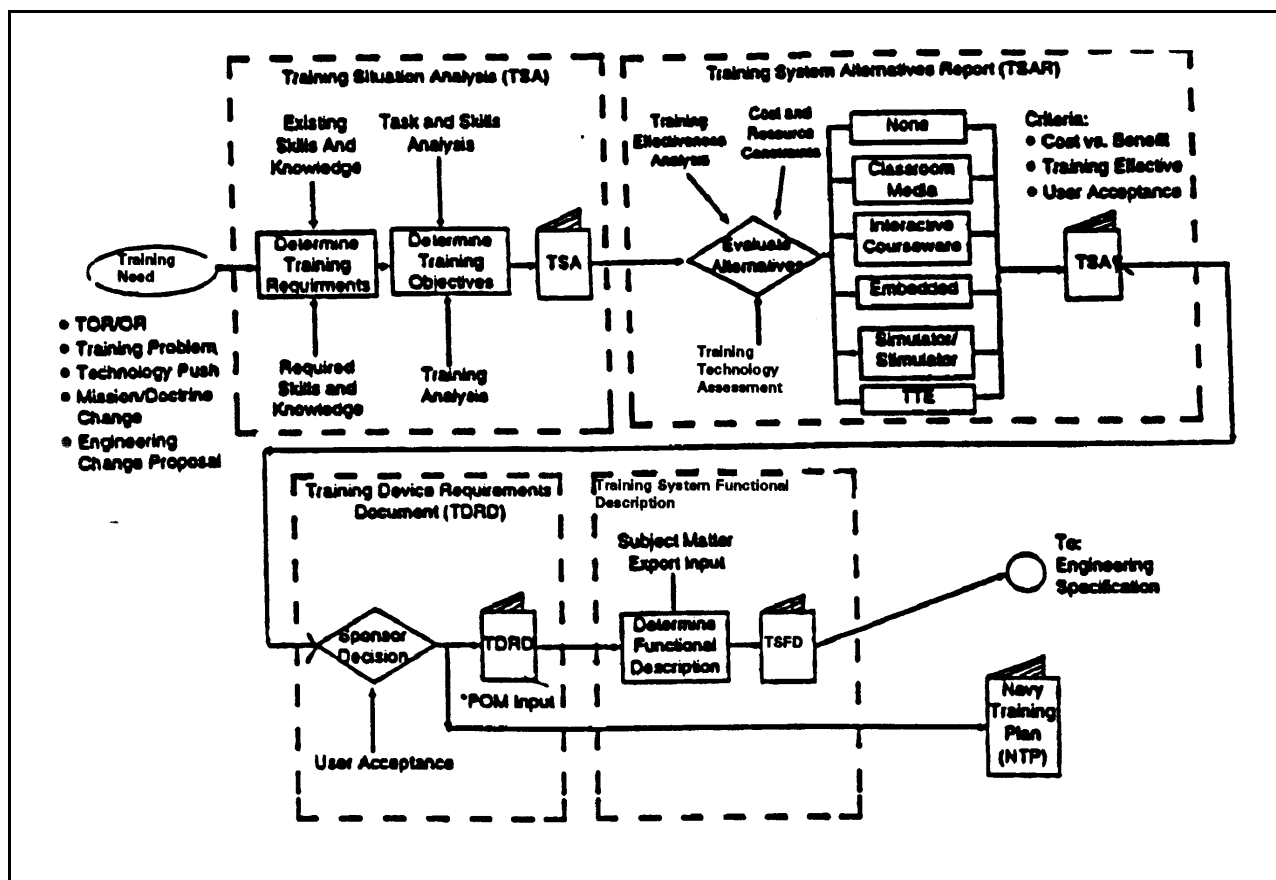


Figure II-B-1. Training System Requirements Analysis Process

scaled, as necessary, to fit the scope of the training situation under review. The TSA results in a recommended strategy for meeting all identified needs, including rough order of magnitude cost estimates, milestones, and schedule. If the recommended strategy includes a training system, then concept exploration activities are initiated in order to define the desired training system.

3. TRAINING SYSTEM ALTERNATIVES REPORT (TSAR).

Once the need for a training system has been identified, the TSAR is used to identify and evaluate alternative approaches to the design of the training system, and to recommend the best approach. The TSAR begins with a description of training requirements (task, learning objective, and training setting documentation), then continues with a descrip-

tion of any constraints that will apply to the training system. Various training system alternatives for meeting the training requirements are identified and described. These alternatives are formulated, in part, from a training technology assessment and a training effectiveness analysis. During these assessments, current and evolving instructional technologies are surveyed and their training capabilities and effectiveness are determined. A cost benefit analysis across many dimensions is performed on the alternatives. Tradeoff areas may include cost and other resource requirements; estimated training effectiveness; engineering risk; schedule implications; Manpower, Personnel, and Training (MTPT) requirements; reliability and maintainability, and safety considerations. The TSAR includes a complete description of the alternatives and a recommended solution with supporting rationale.

The TSAR is submitted to the sponsor for review and selection of the alternative.

4. TRAINING DEVICE REQUIREMENTS DOCUMENT (TDRD)

Once a best training system decision is made, a brief summary document is prepared for funding purposes. The TDRD summarizes the proposed training system, the training requirement, the training situation in which the system will be employed, and the resources required to develop, use, and maintain the training system. The TDRD is a required document and is used to support acquisition of the training system. The document is prepared in accordance with OPNAV guidance (OPNAVINST 5000.5A, Navy Training Simulator and Device Acquisition and Management, 12 Aug 87) and is a life cycle document. As such, it is referenced in the appropriate NTP.

5. TRAINING SYSTEM FUNCTIONAL DESCRIPTION (TSFD)

The TSFD defines the basic physical and functional baseline requirements of a training device as one component of a total instructional system designed to achieve specific learning objectives in a uniform and systematic format. It describes how the trainer will be developed, consistent with any known constraints on cost, producibility and supportability. The TSFD defines the device that will be delivered to the user and also includes information regarding the facilities and logistics elements necessary to support training. In its final form, an approved TSFD is a mutual agreement or con-

tract between the NAWCTSD, the Fleet Project Team (FPT) (or the user(s) where no FPT was established) and the cognizant sponsor; it specifies the physical and functional operating characteristics that will be included in the training device when delivered to the user. As a life cycle document the TSFD is updated to match changes to the training system.

6. NAWCTSD ASSISTANCE IN TRAINING REQUIREMENTS ANALYSIS.

The NAWCTSD can provide assistance at all stages of the training requirements analysis process:

Assisting user commands in identifying and validating training needs;

Assisting sponsoring commands in justifying and specifying training requirements throughout the weapon system acquisition process (WSAP).

Request for assistance from any fleet unit may be forwarded to the cognizant Program Director (PD) in Orlando through the chain of command. Personal visits or telephone contacts are encouraged. After listening carefully to the need statement and performing preliminary analysis to verify understanding of the characteristics and scope of the need, NAWCTSD personnel will work with the requester to develop a Plan of Action and Milestones (POA&M) which meets the requester's objectives.

SECTION II-C

EQUIPMENT FACILITIES REQUIREMENT (EFR)

1. EQUIPMENT FACILITIES REQUIREMENTS (EFR) PLAN.

An EFR Plan is required for any installation of Technical Training Equipment (TTE) or a training device with an end item value of \$500,000 or more. It is NAWCTSD's responsibility when assigned by the cognizant Systems Command (SYSCOM) as the Training Device Training Support Agency (TSA) to develop, coordinate, implement, and monitor EFR planning for the training device. EFR planning for TTE is handled by other TSA. OPNAVINST 11102.1 provides the policies and procedures for Training Equipment Facility Requirements.

2. COG 2"O" EFR RESPONSIBILITIES.

EFR planning is normally performed during the device concept formulation phase. When tasked, the NAWCTSD is responsible for the following:

a. Developing and implementing the EFR Plan in coordination with the Training Agencies (TAs) and their designated representatives.

(1) Providing early identification of training equipment, devices, associated logistic support materials, including curriculum, to be delivered to the TA.

(2) Identifying facility (i.e., air, water, power, and space) and electromagnetic environmental effects (E3) requirements to the TA to support installation of the training equipment.

(3) Participating in the transfer of responsibility for the training program to the TA, including monitoring program deficiencies agreed upon by the TSA and TA until all deficiencies are resolved and final transfer is accomplished.

(4) Maintaining liaison with cognizant offices and commands throughout the process.

(5) When tasked, providing updates as required to the EFR Plan, resulting from pro-

gramming, reprogramming, budget changes, development or production schedule changes, equipment modifications, MILCON schedule changes, etc.; advising all other EFR Plan principals of circumstances and requirements for updates.

3. EFR PROCESS PHASES.

The EFR process is divided into three phases. They are as follows:

a. Preliminary Engineering Site Survey (PESS).

The PESS is conducted as soon as firm tasking is issued by the training system sponsor. Phase I identifies facility modification milestones, facility modification or new construction requirements, and key facility acquisition points of contact. It is the expressed purpose of Phase I to document, for consensus purposes, the facility requirements necessary to support the training system at RFT. Phase I should be completed as soon as possible to allow for all MILCON planning and reprogramming where required.

b. Phase II.

This phase starts during the contract definition (validation) phase and continues until installation is complete. Phase II updates facility requirements, identifies total logistic support elements and the plan and schedule for transfer of responsibility for both the TSA and TA.

c. Phase III.

This phase starts when the system is being installed and continues until final EFR acceptance (transfer) by the TA. It identifies the type of transfer (conditional or final) and is cosigned by the TSA and TA. This should occur when the device has been declared "Ready for Training" (RFT), the date that a new or rehabilitated training facility will be available for training purposes.

